

## Amendments to the claims

1. (currently amended) A method for regulating estrogen levels in an individual who carries the Huntington's disease gene ~~inhibiting the development of Huntington's disease in an individual who is at risk of developing the disease~~, comprising the steps of:

determining that the individual exhibits a trinucleotide repeat pattern, consisting of cytosine, adenine, and guanine (CAG), that comprises at least 38 CAG repeats ~~is of a sufficient number to indicate a risk for developing Huntington's disease~~;

determining the affinity of estradiol to bind to a polyglutamine located at an end of a huntingtin polyglutamine protein to determine an optimum time to begin regulating estrogen levels of said individual;

establishing that a serum level of estrogen ~~a preselected hormone~~ in said individual is below normal for that individual;

administering one or more estrogen compounds ~~hormones~~, selected from a group consisting of ~~estrogen, testosterone, their~~ estrogen's respective precursors, and esters of estrogen, ~~testosterone, and their respective precursors~~, in amounts sufficient to maintain estrogen at a level normal for that individual ~~inhibit development of the disease~~.

2. (canceled) The method of claim 1, wherein said individual exhibits an expanded trinucleotide repeat pattern greater than 38.

3. (canceled) The method of claim 1, wherein said individual exhibits an expanded trinucleotide repeat pattern equal to or greater than 43.

4. (canceled) The method claim 1, wherein said trinucleotide repeat pattern is equal to or greater than 63.

5. (canceled) The method of claim 1, wherein said individual exhibits a huntingtin polyglutamine protein comprising greater than 38 glutamines.

6. (canceled) The method of claim 1, further comprising the step of predetermining the rate at which one or more of said hormones binds to a polyglutamine located at an end of said huntingtin polyglutamine protein to determine an optimum time to begin said administering step and said sufficient amount of said one or more hormones.

7. (currently amended) The method of claim 16, wherein said predetermining step comprises the steps of,

obtaining one or more samples of a huntingtin polyglutamine protein with known numbers of glutamines;

mixing said sample with a labeled estradiol source and a buffering solution;

measuring the binding affinity of the labeled estradiol source to the huntingtin polyglutamine protein..

8. (currently amended) The method of claim 16, wherein said affinity is measured with a gamma counter and is equal to or less than about 50,000 counts per minute.

9. (canceled) A method for determining the optimum time for administering a hormone treatment to inhibit the development of Huntington's disease in an individual who is at risk of developing the disease, comprising the steps of:

determining a plurality of binding affinities of estradiol to a huntingtin polyglutamine protein with known numbers of glutamines; and

measuring the serum level of hormone in said individual to determine if said serum level is below normal.

10. (canceled) The method of claim 9, wherein said affinity is equal to or less than about 50,000 per minute.

11. (canceled) The method of claim 9, wherein said affinity is equal to or less than about 40,000 counts per minute.

12. (canceled) The method of claim 9, wherein said mixing step further comprises mixing said labeled hormone source with a buffering solution.

13. (new) A method for regulating certain hormone levels in an individual who carries the Huntington's disease gene, comprising the steps of:

determining that the individual exhibits a trinucleotide repeat pattern, consisting of cytosine, adenine, and guanine (CAG), that comprises at least 38 CAG;

determining the affinity of estradiol to bind to a polyglutamine located at an end of a huntingtin polyglutamine protein to determine an optimum time to begin regulating estrogen levels of said individual;

establishing that a serum level of one or more hormone compounds, selected from a group consisting of-estrogen, testosterone, progesterone, and their respective precursors, in said individual is below normal for that individual; and

administering one or more of said hormone compounds or an ester of said one or more of said hormone compounds to maintain said hormone compounds at a level normal for that individual.